

Murphy, Susan

From: Mann, Alexander
Sent: Monday, June 09, 2008 9:27 AM
To: Murphy, Susan
Cc: Frankhauser Jr, Wayne
Subject: Riggs Brook Bridge #2719, Augusta 15087.00 on Rts 100/201

Susan

Attached please find the worksheet for Riggs Brook in Augusta (15087.00) with the attached location map. The analysis indicates the flows will be:

Q50 – 1224CFS
Q100 – 1407CFS
Q500 – 1853CFS

Please let me know if you have any questions or need any more information.

Alex

6/9/2008

Project Name: Augusta
 Stream Name: Riggs Brook
 Bridge Name: Riggs Bridge
 Route No. Rts 100/201
 Analysis by: A. W. Mann

PIN: 015087.00
 Town: Augusta
 Bridge No. 2719
 USGS Quad:
 Date: 5/29/2008

Peak Flow Calculations by USGS Regression Equations (Hodgkins, 1999)

Enter data in blue cells only!

A	48.95	km ²	mi ²	ac
W	6.8			

Use just one consistent set of units:
 Watershed Area
 Wetlands area (by NWI)

A (km²) 48.950
 W (%) 13.89
 Conf Lvl 0.67

Worksheet prepared by:
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Reference:

Hodgkins, G., 1999.
 Estimating the magnitude of peak flows for streams
 in Maine for selected recurrence intervals
Water-Resources Investigations Report 99-4008
 US Geological Survey, Augusta, Maine

Ret Pd	Peak Flow Estimate	
T (yr)	Lower	Upper
1.1	6.38	
2	8.91	12.44
5	13.49	18.88
10	16.66	23.57
25	20.78	29.81
50	23.88	34.65
100	27.13	39.84
500	34.62	52.47

Q _T (ft ³ /s)
225.3
439.2
666.6
832.2
1052.6
1223.5
1406.9
1852.8

$$Q_T = b \times A^a \times 10^{-wW}$$